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CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date below:	
7/29/02	<i>James A. Harris</i>
Date	Signature



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
DANIEL L. GYSLING

Serial No.: 10/010,183

Filed: November 7, 2001

For: FLUID DENSITY MEASUREMENT IN
PIPES USING ACOUSTIC PRESSURES

Confirmation No.:

Group Art Unit: 2856

Examiner:

Atty. Dkt. No.: 13137.0105.NPL
WEAF:105

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form PTO-1449 be considered by the Examiner and made of Record. Copies of the listed are enclosed for the convenience of the Examiner.

Applicant is pursuing several somewhat related applications relating to flow meters, and most of the references disclosed on this Information Disclosure Statement have been cited in these various applications. In the spirit of full disclosure, Applicant believes it prudent to submit these references to the Examiner in this case for the Examiner's consideration, although some of

the references may not be as pertinent as the art of record or art of record in priority cases, if any. Some of these references may be redundant of references already submitted in the case, and if so, Applicant apologizes for the redundancy, but Applicant wants to ensure that the Examiner has a copy of the references.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, prior art or material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed before the mailing of a First Office Action on the merits, therefore, in accordance with 37 C.F.R. § 1.97(b)(3), no fees are believed to be due. However, should any fees be deemed necessary, the Commissioner is hereby authorized to charge any additional fees which may be required to Deposit Account No.: 01-2508/13137.0105.NPUS00/LWT.

Applicants respectfully request that the listed documents be made of record in the present case, and that the Examiner initial the spaces on Form PTO-1449 to evidence the same.

Respectfully submitted,



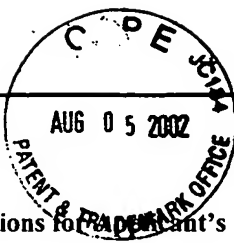
Terril Lewis
Reg. No. 46,065
Agent for Assignee
WEATHERFORD/LAMB, INC.

Howrey Simon Arnold & White, LLP
750 Bering Drive
Houston, TX 77057-2198
(713) 787-1400

Date: July 24, 2002

Form PTO-1449 (modified)

AUG 05 2002


 Atty. Docket No.
 13137.0105.NPUS00
 WEAFF:105

 Serial No.
 10/010,183

List of Patents and Publications for Applicant's

 Applicant
 Gysling et al.

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
12	A1	5,372,046	12/13/94	Kleven	—	—	
	A2	4,862,750	9/5/89	Nice	—	—	
	A3	4,275,602	6/30/81	Fujishiro	—	—	
	A4	5,576,497	11/19/96	Vignos	—	—	
	A5	4,864,868	9/12/89	Khalifa	—	—	
	A6	6,158,288	12/12/00	Smith	—	—	
	A7	5,591,922	1/7/97	Segeral	—	—	
	A8	5,367,911	11/29/94	Jewell	—	—	
	A9	5,708,211	1/13/98	Jepson	—	—	
	A10	4,546,649	10/15/85	Kantor	—	—	
	A11	5,493,512	2/20/96	Peube	—	—	
	A12	5,845,033	12/1/98	Berthold	—	—	
	A13	5,741,980	4/21/98	Hill	—	—	
	A14	5,218,197	6/8/93	Carroll	—	—	
	A15	4,080,837	3/28/78	Alexander	—	—	
	A16	5,398,542	3/21/95	Vasbinder	—	—	
	A17	5,363,342	11/8/94	Layton	—	—	
	A18	5,083,452	1/28/92	Hope	—	—	
	A19	4,114,439	9/19/78	Fick	—	—	
	A20	5,115,670	5/26/92	Shen	—	—	
	A21	4,950,883	8/21/90	Glenn	—	—	
12	A22	4,996,419	2/26/91	Morey	—	—	

EXAMINER:

John Kurke

DATE CONSIDERED:

11/28/03

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
HC	A23	5,317,576	5/31/94	Leonberger	—	—	
	A24	5,401,956	3/28/95	Dunphy	—	—	
	A25	5,426,297	6/20/95	Dunphy	—	—	
	A26	5,513,913	5/7/96	Ball	—	—	
	A27	5,564,832	10/15/96	Ball	—	—	
	A28	5,493,390	2/20/96	Varasi	—	—	
	A29	3,851,521	12/3/74	Ottenstein	—	—	
	A30	4,445,389	5/1/84	Potzick	—	—	
	A31	4,520,320	5/28/85	Potzick	—	—	
	A32	5,040,415	8/20/91	Barkhoudarian	—	—	
	A33	4,932,262	6/12/90	Wlodarczyk	—	—	
	A34	4,896,540	1/30/90	Shakkottai	—	—	
	A35	5,207,107	5/4/93	Wolf	—	—	
	A36	4,159,646	7/3/79	Paulsen	—	—	
	A37	5,925,821	7/20/99	Bousquet	—	—	
	A38	4,236,406	12/2/80	Reed	—	—	
	A39	4,164,865	8/21/79	Hall	—	—	
	A40	4,144,768	3/20/79	Andersson	—	—	
	A41	5,639,667	6/17/97	Heslot	—	—	
	A42	5,842,347	12/1/98	Kinder	—	—	
	A43	3,149,492	9/22/64	Weinberg	—	—	
HC	A44	4,515,473	5/7/85	Mermelstein	—	—	

EXAMINER:

Helen Kurke

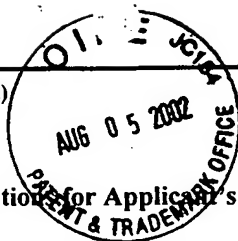
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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
KR	A45	4,706,501	11/17/87	Atkinson	—	—	
	A46	4,976,151	12/11/90	Morishita	—	—	
	A47	5,024,099	6/28/91	Lee	—	—	
	A48	5,031,460	7/16/91	Kanekobu	—	—	
	A49	5,361,130	11/1/94	Kersey	—	—	
	A50	5,440,932	8/15/95	Wareham	—	—	
	A51	5,670,720	9/23/97	Clark	—	—	
	A52	5,680,489	10/22/97	Kersey	—	—	
	A53	5,058,437	10/22/91	Chaumont	—	—	
	A54	5,730,219	3/24/98	Tubel	—	—	
	A55	5,732,776	3/31/98	Tubel	—	—	
	A56	5,803,167	9/8/98	Bussear	—	—	
	A57	5,906,238	5/25/99	Carmody	—	—	
	A58	5,959,547	9/28/99	Tubel	—	—	
	A59	5,975,204	11/2/99	Tubel	—	—	
	A60	5,992,519	11/30/99	Ramakrishnan	—	—	
	A61	5,996,690	12/7/99	Shaw	—	—	
	A62	6,002,985	12/14/99	Stephenson	—	—	
	A63	5,321,991	6/21/94	Kalotay	—	—	
	A64	5,644,093	7/1/97	Wright	—	—	
	A65	5,907,104	5/25/99	Cage	—	—	
KR	A66	5,939,643	8/17/99	Oertel	—	—	

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Helen Kunk

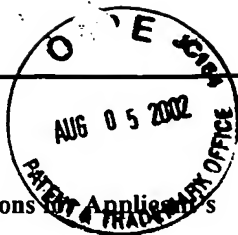
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Atty. Docket No.
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List of Patents and Publications

Applicant
Gysling et al.

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
182	A67	5,347,873	9/20/94	Vander Heyden	—	—	
	A68	5,908,990	6/1/99	Cummings	—	—	
	A69	5,051,922	9/24/91	Toral	—	—	
	A70	4,499,418	2/12/85	Helms	—	—	
	A71	4,947,127	8/7/90	Helms	—	—	
	A72	5,956,132	9/21/99	Donzier	—	—	
	A73	6,003,383	12/21/99	Zielinska	—	—	
	A74	6,003,385	12/21/99	De Vanssay	—	—	
	A75	4,788,852	12/6/88	Martin	—	—	
	A76	4,813,270	3/21/89	Baillie	—	—	
	A77	4,884,457	12/5/89	Hatton	—	—	
	A78	5,099,697	3/31/92	Agar	—	—	
	A79	5,654,551	8/5/97	Watt	—	—	
	A80	6,216,532	4/17/01	Stephenson	—	—	
	A81	5,925,879	7/20/99	Hay	—	—	
	A82	6,009,216	12/28/99	Pruett	—	—	
	A83	5,689,540	11/18/97	Stephenson	—	—	
	A84	5,963,880	10/5/99	Smith	—	—	
	A85	5,804,713	9/8/98	Kluth	—	—	
	A86	5,597,961	1/28/97	Marrelli	—	—	
	A87	5,152,181	10/6/92	Lew	—	—	
182	A88	6,279,660	8/28/01	Hay	—	—	

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Helen Kwole

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
<i>AK</i>	A89	6,642,098	6/24/97	Santa Maria	—	—	
<i>AK</i>	A90	6,016,702	1/25/00	Maron	—	—	
<i>AK</i>	A91	6,354,147	3/12/02	Gysling	—	—	
<i>AK</i>	A92	6,233,374	5/15/01	Ogle	—	—	

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
<i>AK</i>	B1	WO 96/04528	2/15/96	WIPO	—	—	
<i>AK</i>	B2	FR 2 357 868	7/7/76	France	—	—	No
<i>AK</i>	B3	JP 406082281	9/1/92	Japan	—	—	Yes
<i>AK</i>	B4	WO 93/14382	7/22/93	WIPO	—	—	
<i>AK</i>	B5	DE 19511234	12/7/95	Germany	—	—	No
<i>AK</i>	B6	WO 00/00793	1/6/00	WIPO	—	—	
<i>AK</i>	B7	EP 0684458	5/15/95	Europe	—	—	
	B8						

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
<i>AK</i>	C1	Mesch, F. (1990) "Speed and Flow Measurement by an Intelligent Correlation System", Advances in Instrumentation and Control, Research Triangle Park, NC, part 4, p.1899-1914.
<i>AK</i>	C2	Specification for US Patent Application Serial No.09/345,827, filed 7/2/99, Attorney docket: WEAFF:060.

EXAMINER:

Helen Kurck

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1/28/03

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List of Patents and Publications for Applicant

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
102	C3	Specification for US Patent Application Serial No.09/346,607, filed 7/2/99, Attorney docket: WEAFF:057.
102	C4	Specification for US Patent Application Serial No.09/740,760, filed 11/29/00, Attorney docket: WEAFF:072.
102	C5	Specification for US Patent Application Serial No.09/326,097, filed 6/4/99, Attorney docket: WEAFF:047.
102	C6	Specification for US Patent Application Serial No.09/519,785, filed 3/7/00, Attorney docket: WEAFF:061.
102	C7	Specification for US Patent Application Serial No.09/346,606, filed 7/2/99, Attorney docket: WEAFF:071.
102	C8	Specification for US Patent Application Serial No.09/346,605, filed 7/2/99, Attorney docket: WEAFF:078.
102	C9	Specification for US Patent Application Serial No.09/344,069, filed 6/25/99, Attorney docket: WEAFF:106.
102	C10	Gysling, D. (1999) "Development of a Fiber Optic Downhole Multiphase Flow Meter", in "Field Applications & New Technologies for Multiphase Metering", Multiphase Technology Series Conference, Aberdeen, Scotland.
102	C11	Beranek, L. and Ver, I. (1992) in "Noise and Vibration Control Engineering, Principles and Application", John Wiley & Sons, Inc., Chapter 14, p:537-541.
102	C12	Dowling, A. and Williams, J. in "Sound and Sources of Sound", Ellis Horwood Limited, Section 4, p:79-80
102	C13	Kersey, A. et al. (1993) "Multiplexed Fiber Bragg Grating Strain-Sensor System with a Fiber Fabry-Perot Wavelength Filter", Optics Letters, 18:1370-1372.
102	C14	Dandridge, A. & Cogdell, G. (1991) "Fiber Optic Sensors for Navy Applications", IEEE, LCS, 2:81-89.
102	C15	Nielsen, R. (1991) "Sonar Signal Processing", Artech Huse Inc., Chapter 2, p:51-59.

EXAMINER:

John Kueck

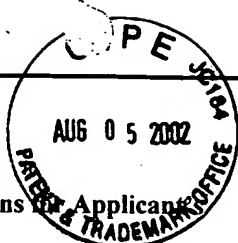
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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
<i>KR</i>	C16	Krim A. and Viberg M. (1996) "Two Decades of Array Signal Processing Research", IEEE Signal Processing Magazine, p:67-94.
<i>KR</i>	C17	Kersey A. and Darkin, J., Editors (1992) SPIE Vol. 1586, "Distributed and Multiplexed Fiber Optic Sensors", p:1-243.
<i>KR</i>	C18	Nerby <i>et al.</i> "A cost effective technique for production well testing", (1995) Offshore Technology Conference, p:505-515.
<i>KR</i>	C19	

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